

REMARKS

In the Claims:

Claims 45, 46, 48-50, 53, 58, and 60-62 are currently pending in this application. Applicants have amended Claims 45 and 58 to further emphasize the novelty of the claimed invention. No new matter has been added by virtue of these amendments. Support for these amendments may be found throughout the specification, and especially in paragraphs 5 and 198-206.

Independent claims 45 and 58 are drawn to stents made from wire and having integrally formed barbs. As mentioned in the background section of the present application, one of the issues in the prior art is that, in use, the barbs on a wire stent can separate from the wire due to internal body forces acting on the stent, such as cyclical loading caused by cardiovascular pulsatile forces. Such forces can cause mechanical fatigue and failure at the barb-stent junction. See e.g., ¶¶17-20.

Wire stents with non-integral barbs may be prone to fracture, detachment, and the like, because the junction between the wire and the barb acts as a stress concentrator and because the chemically and/or mechanically-modified junction has a tendency to corrode when subjected to a saline, oxygen-rich physiological environment. See e.g., ¶¶18-19. Similarly, wire stents with barbs that are oriented by bending or plastically deforming the barb may also be susceptible to mechanical fatigue and failure because bending the barb can induce undesirable strains in the stent that weaken the barb-stent junction. See e.g., ¶¶17-20 and 198-206.

The claimed invention addresses these problems by providing a wire stent with an integral barb (*i.e.* the barb has not been attached to the wire during the manufacturing process) that points in a predetermined direction. See e.g., Claims 45, 58, and ¶5. The barb is unbent with respect to the wire and consequently, is free of weakening due to bending. See e.g., Claims 45, 58, and ¶5.

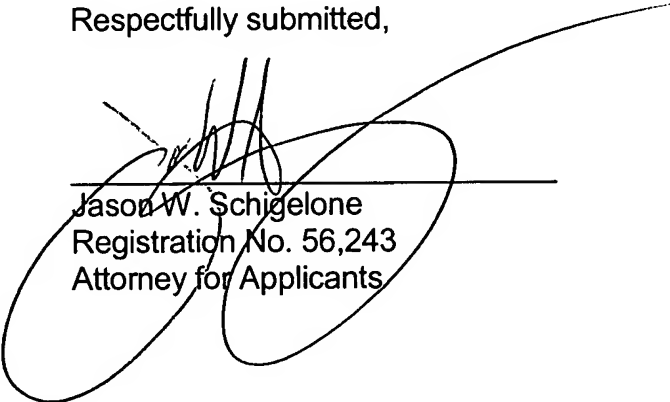
In contrast, the prior art of record clearly contemplates attachment systems with non-integrally formed barbs and barbs that are bent. See e.g., Chuter, figures 7a-7b;

col. 8, lines 51-54 ("[h]ooks 90 may be connected to each proximal apex by welding or gluing or other suitable connecting means;") and col. 8, lines 64-65 ("[h]ooks 96 may be added, either by shaping them from the continuous cylinder, or by welding or gluing them on."). (Emphasis added.) Therefore, Applicants respectfully assert that the amended claims are patentably distinct over the prior art.

SUMMARY

Applicants believe that the present claims are patentable and that the application is in a condition for allowance. Accordingly, Applicants respectfully request that the Examiner grant early allowance of the application. The Examiner is invited to contact the undersigned attorney for the Applicants via telephone if such communication would expedite this application.

Respectfully submitted,



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